Primary Success Publications

Math Success Grade Two

By Jean Roberts

A complete math program with great lesson plans, lots of hands-on ideas and review features that ensure understanding.

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by Jean Roberts

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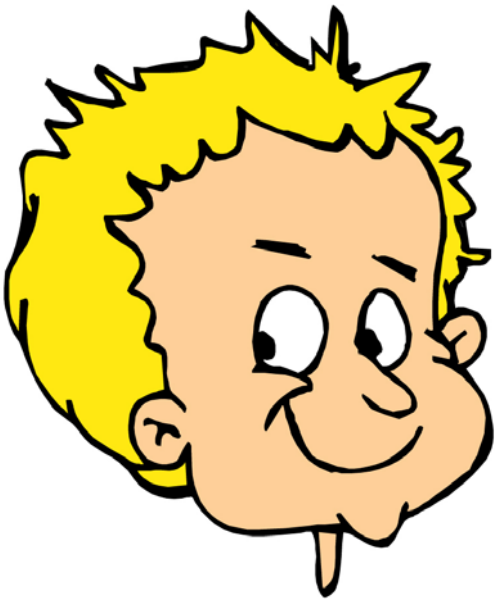
Vocabulary words

1. plus
2. brackets
3. sum
4. addends
5. ten frame
6. minus
7. group
8. re-group
9. hundred
10. thousand
11. subtract, subtraction
12. difference
13. circle, sphere
14. square, cube
15. multiply
16. times
17. centimeter
18. fraction
19. coins
20. triangle
21. pyramid
22. odd, even
23. cone
24. cylinder
25. degree Celsius
26. ordinal numbers
27. weight - heavier, lighter
28. second, minute, hour, day
29. day, week, month, year



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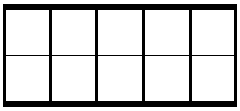
Week 5 - All About 11

Day 1 – Working with 10, the ten frame

Oral Review - Count by 1's to 100, count by 2's to 20, count by 5's to 50, count by 10's to 100, forward and backward. Orally review the combinations of 10. Subtract from 10, thinking of the 'tricks'. Review the meaning of the equal sign, and how to do missing addends. Discuss the more than and less than signs.

Daily Problem - *My sister is 11 years old. I am 7. How old was my sister when I was born?*

Vocabulary Word of the Week - *ten frame* Learn the meaning -



Lesson - ***We want the children to be able to manipulate numbers to see patterns and re-group to make problems easier. They must have a good knowledge of the combinations to 10 in order to do this. If you feel the children are not ready to go on to larger numbers, spend more time on the combinations to 10!***

Introduce the ten frame if the students are not familiar with 10 in this form. Talk about the frame - that it has two rows of 5, that it is in twos vertically. Give each student one of the frames and flat manipulatives that fit in the squares. Count aloud to 10 as they put an object in each square of the first frame, filling the squares from left to right.

Go through the combinations for 10 by putting different amounts of counters in the squares and talking about how many more would be needed to fill the ten frame. Always fill the frame from the left end, first the top and then the bottom square. Practice doing this.

Have each student put as many counters as he/she wishes in the frame, leaving at least one empty. On a slip of paper the child prints the number needed to fill the frame. For example, if the student fills 4 squares, he prints the number 6 on the slip of paper. This is put face down on the desk. Now the children change places, think the answer and check on the paper. Do they have to count out the empty spaces or can they just 'see' the answer? Continue to change places and do the question.

Hand out the second ten frame. With the first frame full, add counters one at a time to the second frame, counting as you go…. 11, 12, 13, etc. Empty the second frame again and add one counter as you do these: 10 + 1, 10 + 2, 10 + 3, 10 + 4, etc.

Print 10 + 1 = 11, 10 + 2 = 12 and on to 10 + 9 = 19. Talk about tens and ones.

Drill the 10 + …. questions until you feel that all the students are comfortable with this concept.

Can you find a 10? Give questions such as 7 + 3 + 1 and have the students put in brackets around the 7 + 3 to show the 10.

Practice - 5.1 Review, ten frames, adding to 10

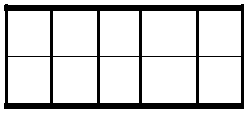
Discussion / Closure - What do brackets tell us to do? Review the combinations of 10. Review adding 10…..10 + 1, 10 + 2, 10 + 3, etc.

Day 2 – Discovering 11

Oral Review - Count by 1's to 100, count by 2's to 20, count by 5's to 50, count by 10's to 100, forward and backward. Orally review the combinations of 10. Subtract from 10, thinking of the 'tricks'. Review the meaning of the equal sign, and how to do missing addends. Discuss the more than and less than signs.

Daily Problem - *What things come in 10's? 10 fingers, 10 toes, a dime is 10, 10 in the metric system (10 mm in a cm,, etc.), Ten Commandments*

Vocabulary Word of the Week - *ten frame* Learn the meaning -



Lesson -

Review the combinations of 10. Then add 10 + 1, 10 + 2, etc. Do this with the ten frames. Discuss filling the frame from left to right, in twos. Give questions such as 4 + 6 + 1 = and have the students put brackets to show the 10.

Give each child 11 counters. Have them manipulate their counters to explore the combinations of 11. Have them print a list of the addition equations with 2 addends. _____ + _____ = 11

One of these equations will be 10 + 1 = 11. 10 is the magic number! How can we use 10 to help us add to 11?

Make each combination for 11 by putting each number in one of the ten frames. The students should already firmly know that we add with the largest addend first, so the reverse questions such as 4 + 7 will be answered as 7 + 4.

9 + 2 = 11 Put 9 of one colour in the first frame and 2 of a different colour in the second frame. How can we fill the first ten frame? We slide one over. We have changed the 2 to 1 + 1. We can write it as: 9 + 1 + 1 = 11 What would be the easiest way to add this? Put in brackets to show that we have made a 10: (9 + 1) + 1 ,,,, and this is the same as 10 + 1 = and that is an easy question!

Do the following with the different coloured counters on the ten frame.

8 + 3 = 8 + 2 + 1 = (8 + 2) + 1 = 10 + 1 = 11
7 + 4 = 7 + 3 + 1 = (7 + 3) + 1 = 10 + 1 = 11
6 + 5 = 6 + 4 + 1 = (6 + 5) + 1 = 10 + 1 = 11

Have the students put 7 and 4 counters on the two ten frames. How many will we move to make a 10? After we have moved them, ask - 'Do we still have the same amount all together?'

Put 7 in the first ten frame and 4 in the second 7 + 4 = _____ What will you do to add? You take the 4 apart and put 3 into the first frame. Show how we do this with numbers as at the right. Say, "We want to make the 10, so we need 3 more. Where do we get the 3? The 4 is now 3 + 1.. Cross out the 4. We show the 10 with brackets and now we have a very easy question to answer."

(3 + 1)
7 + 4 =
7 + 3 + 1 =
(7 + 3) + 1 =

Do you know the partners for 11? There are only 4 different addition questions about 11.

Practice - 5.2

Discussion / Closure - How do the ten frames help us add? There is a ten hiding in all these questions. If you were asked 7 + 4 = ___, can you find a ten in the question? Tricky!

Quickly drill the partners for 10. Quickly review adding 10…. 10 + 1, 10 + 2, 10 + 3, etc.

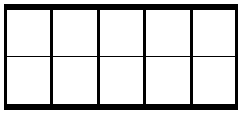
Do the children know the partners for 11?

Day 3 - Different Ways to Add

Oral Review - Count by 1's to 100, count by 2's to 20, count by 5's to 50, count by 10's to 100, forward and backward. Orally review the combinations of 10. Subtract from 10, thinking of the 'tricks'. Review the meaning of the equal sign, and how to do missing addends. Discuss the more than and less than signs.

Daily Problem - *Place 101 jellybeans or other objects in a clear plastic container (large peanut butter jar works well). Have each child print their name and their estimate of the number of objects in another container. When answering the problem, count in 10's and discuss the 100 and the way of writing 101 with 0 in the 10's place.*

Vocabulary Word of the Week - *ten frame* Learn the meaning -



Lesson - Put the following equations on the chalkboard or chart.

10 + 1 = 11	1 + 10 = 11
9 + 2 = 11	2 + 9 = 11
8 + 3 = 11	3 + 8 = 11
7 + 4 = 11	4 + 7 = 11
6 + 5 = 5	5 + 6 = 11

Which is the easiest way to answer the questions? We usually put the largest number first.

Ask the children to think of easy ways to remember these facts. Review each method as the children suggest it.

- Adding 1 or 2 or 3 by counting on. (9 + 2, 8 + 3)
- We could use 5 + 5 (a double) and add one to find the answer to 5 + 6 and 6 + 5.
- We can simply remember the answer.
- We can find the 'magic 10'.

Do a number of questions like this, having the students tell you how the equation can be changed to make it easier to do. You can call it a 'trick' - children like to think they can do tricks!

$$6 + \overset{(4+1)}{\cancel{5}} = (6 + 4) + 1 = 10 + 1 = 11$$

Would it be easier this way? Try it!

5 + 6 =

Give them questions and see if they can do it on paper, with the ten frames and without. Have them explain what they are doing to you and each other.

What about subtraction from 11? If the students know those 4 sets of partners that equal 11, then they can also subtract. Practice the partners and use them to do the subtraction.

Practice - 5.3 Adding with 10 and 11.

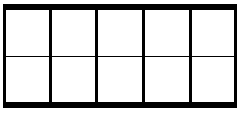
Discussion / Closure - Review partners for 11. Drill subtraction from 11, using the partners. What subtraction from 11 is easy and what questions are difficult? Can the children now give you the partners for 11?

6 and 5 7 and 4 8 and 3 9 and 2

Day 4 – Place value to 100

Oral Review - Count by 1's to 100, count by 2's to 20, count by 5's to 100, count by 10's to 100, count backwards from 20. Orally review the combinations of 10 and 11.

Daily Problem - *I had 11 cookies. I gave 2 to _____, I gave 2 to _____, I ate 3 (and they were very good), and I gave 3 to _____. How many did I have left?*

Vocabulary Word of the Week - *ten frame* Learn the meaning - 

Lesson - ***This is the same lesson as last week. Check to make sure every child understands the concept of place value to 100.***

Give each child a handful of manipulative objects – more than 40 and less than 100. You can use popsicle sticks, beans, blocks or any other counters. Have them estimate how many they have and write that number down. Ask them to count their objects. Watch how they are counting. They should be counting in 10's, and putting the objects into groups of 10 as they count – otherwise they will lose count or make errors. Have them write down their answer. After they have an answer, have them check by putting the objects into 10's if they didn't do it that way at first. How do you count to the answer? Count by 10's and then 1's for the few left. How close were they to the estimation?

Have the children put the manipulatives back into one pile, and trade seats with a child across the room and go through the same process. Do this several times – as often as time permits.

Are your estimates closer after you did a few counts?

Practice - 5.4 Photocopy the stars on the back of the practice sheet 5.4.

Discussion / Closure - Have the children explain how to count many objects and get the correct amount. Talk about the way to count by tens first and then by ones.

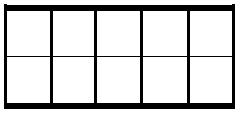
Review adding 10…. 10 + 1, 10 + 2, 10 + 3, etc.

Can the children now give you the partners for 11?

6 and 7 and 4 8 and 3 9 and 3

Day 5 – Review

Problem of the Day – _____ *has 6 dimes, 2 nickels and 8 pennies. He sees a toy car for 85¢ . Does he have enough money to buy it?*



Vocabulary Word of the Week - *ten frame* Learn the meaning - Have the students tell you how it is used.

Speed Sheet #5 - Addition to 10 review. Do Speed Sheet 5. Hand out the papers face down - no peeking! Print the name on the back. At the 'GO!' signal, the children turn over the papers and work in a prescribed direction - down or across each row. Give the children two minutes and then say 'STOP!' The children circle the last question they answered. Then they complete the sheet. Score as described in the introduction.

Review #5 - Give the children time for most to complete the sheet. Mark and score.

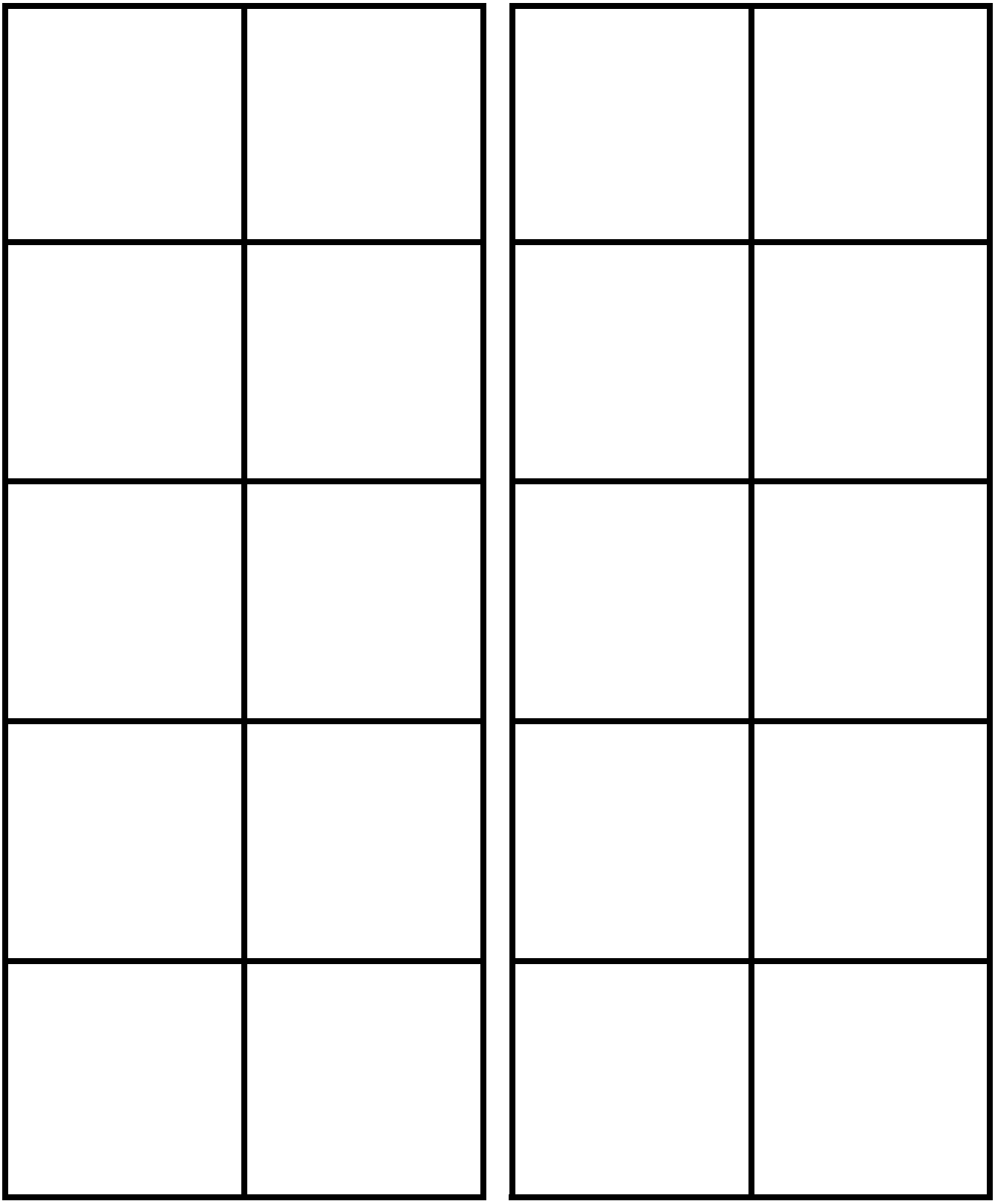
- 10 points – 2 points for each counting line
- 8 points for 'make 4 equations'
- 5 points for missing addends
- 4 points for first magic 10 section
- 8 points for second magic 10 section
- 15 for subtraction

Discussion / Closure - How did you feel when doing the speed sheet? Some people feel nervous or find it difficult to think when they must do something quickly. This is normal. What could you do if you feel that way?

Did you find any of the test difficult? If you did, we will do more on these skills in the next weeks to help you.

Notes:

ten frames



5.1 Wonderful 10 !

Name _____
My Number is #____

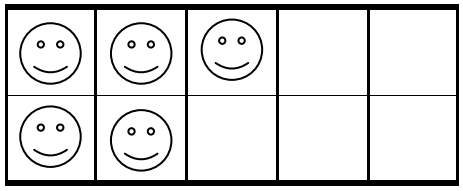
Give the partners for 10

4 + ____ = 10 **10 + ____ = 10** **1 + ____ = 10** **9 + ____ = 10**

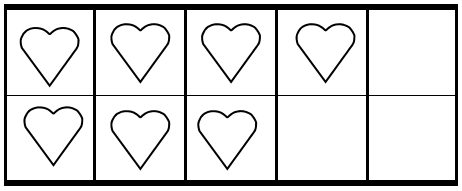
8 + ____ = 10 **0 + ____ = 10** **7 + ____ = 10** **2 + ____ = 10**

3 + ____ = 10 **5 + ____ = 10** **6 + ____ = 10**

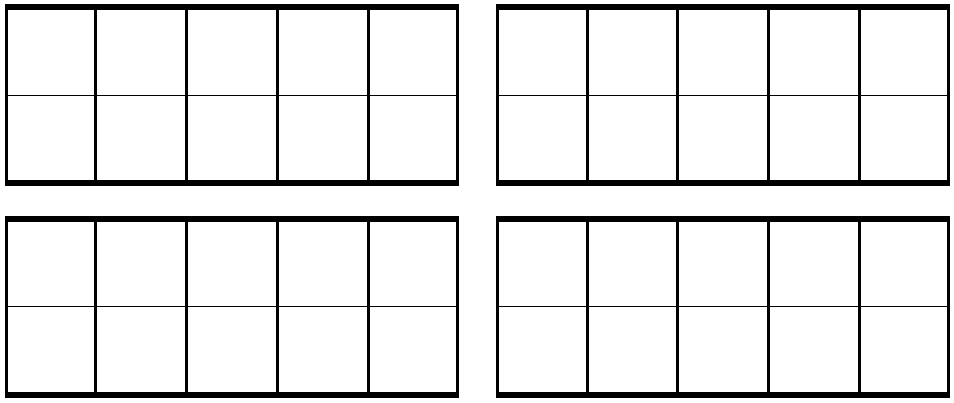
Use the ten frame to find the partners for 10



__ + __ = 10



__ + __ = 10



Show 14
10 + 4 = ____

Show 17
__ + __ = ____

---

10 + 6 = **4 + 10 =** **10 + 8 =**

10 + 2 = **10 + 7 =** **6 + 10 =**

10 + 9 = **5 + 10 =** **10 + 3 =**

3 + 10 = **10 + 1 =** **7 + 10 =**

Count up from this number

46, _____, _____, _____, _____, _____, _____, _____

Find the missing addends

_____ + 6 = 10 **9 = 5 + _____** **10 = _____ + 5**

7 + _____ = 9 **_____ + 8 = 9** **3 + _____ = 10**

5.2 Learning About 11 !

Name _____

My Number is #___

Give the partners for 10

5 + ____ = 10 **10 + ____ = 10** **0 + ____ = 10** **1 + ____ = 10**

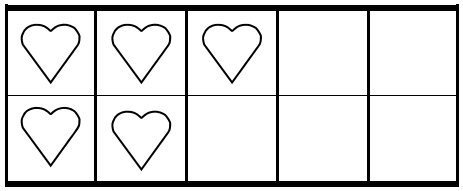
7 + ____ = 10 **9 + ____ = 10** **6 + ____ = 10** **3 + ____ = 10**

2 + ____ = 10 **4 + ____ = 10** **8 + ____ = 10**

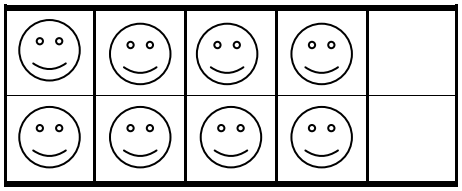
Bracket the 10 and print the new equation

2 + 8 + 1 = __ **9 + 1 + 1 = __** **3 + 7 + 1 = __**

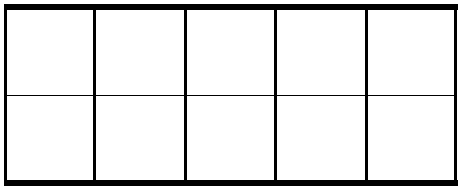
__ + __ = __ **__ + __ = __** **__ + __ = __**

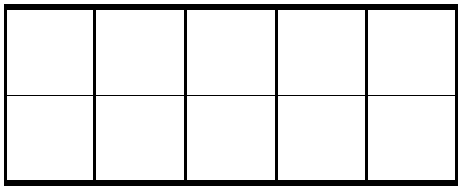


__ + __ = 10



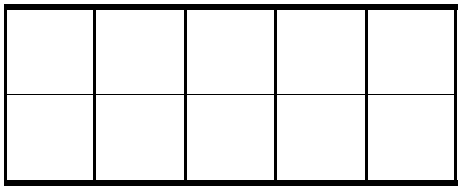
__ + __ = 10

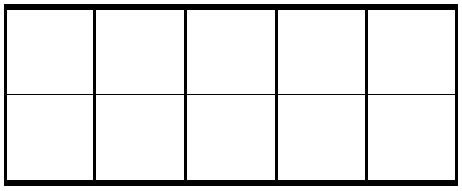




Show 12

10 + 2 = ____





Show 15

__ + __ = ____

Count up from this number

67, _____, _____, _____, _____, _____, _____, _____

Give the partners for 11

4 and _____ 9 and _____ 5 and _____

2 and _____ 1 and _____ 0 and _____

10 and _____ 7 and _____ 8 and _____

6 and _____ 3 and _____

Name _____

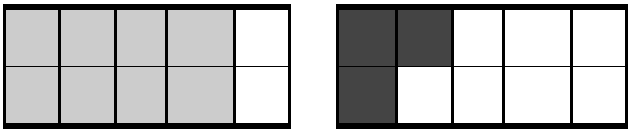
5.3 Learning About 11 ! My Number is #___

Count

77, 78, 79, _____, _____, _____, _____, _____, _____, _____

84, 83, 82, _____, _____, _____, _____, _____, _____, _____

How can you change the 3 to make the 10?



_ + _

8 + 3 =

(8 + __) + ____ =

Can you make a 10 ? Use counters if you wish.

_ + _

6 + 5 = __

(6 + __) + __ = __

_ + _

7 + 4 = __

(7 + __) + __ = __

This is tricky! Some answers are 10 and some are 11. Use counters if you wish.

8	**6**	**3**	**4**	**8**	**7**	**7**
+2	**+5**	**+7**	**+6**	**+3**	**+4**	**+3**
5	**3**	**2**	**5**	**4**	**2**	**2**
+5	**+8**	**+9**	**+6**	**+7**	**+9**	**+8**

Subtract

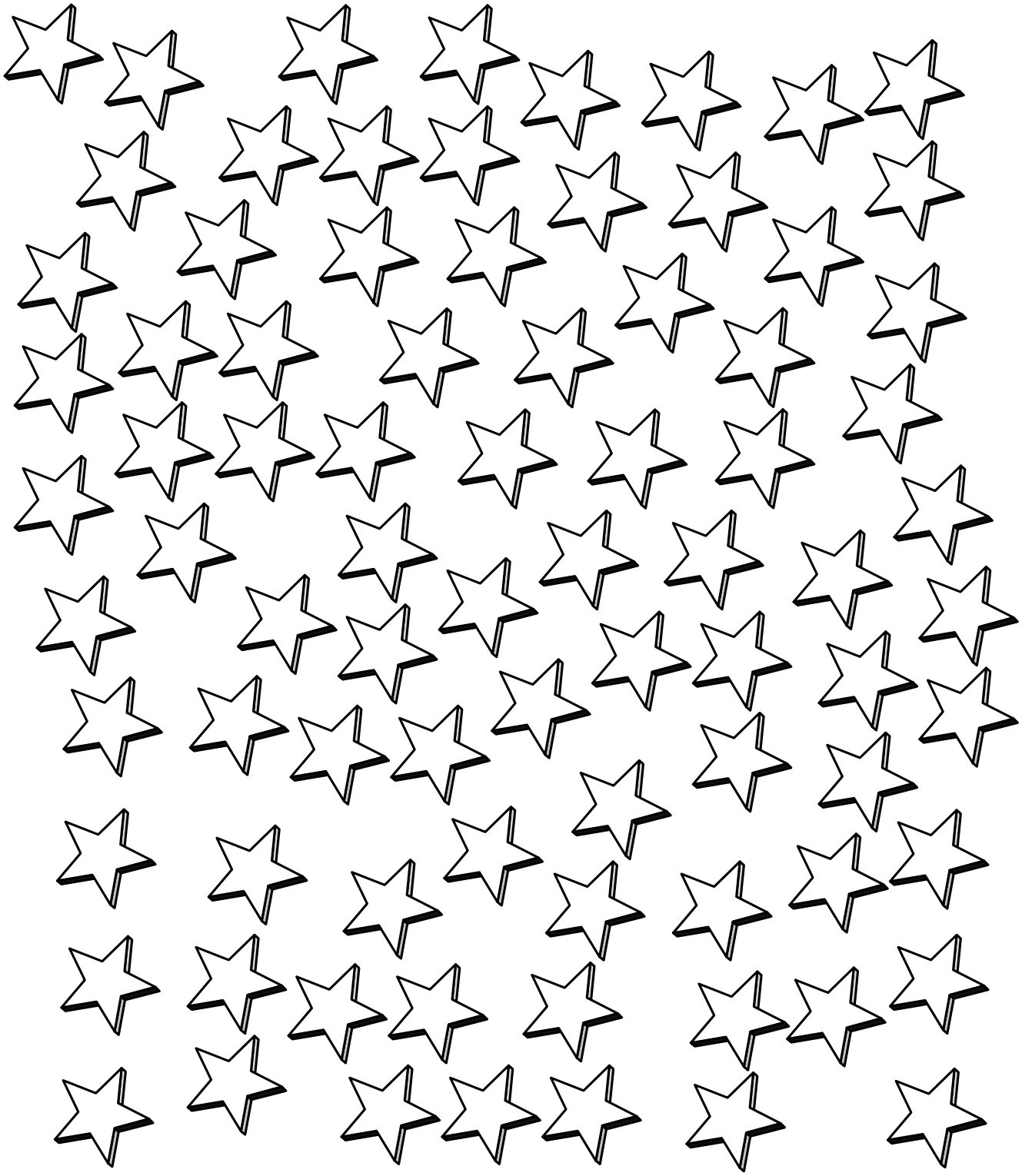
11	**11**	**11**	**10**	**11**	**10**	**11**
- 3	**- 1**	**- 8**	**-6**	**- 2**	**- 8**	**- 5**
11	**11**	**11**	**10**	**10**	**11**	**10**
- 4	**- 9**	**- 7**	**- 5**	**- 7**	**- 6**	**- 5**

Name _____

5.4 Count to 100

My Number is #___

0									
100									



How many? _____

Speed Sheet #5

Name _____
My Number is #____

Score
___ /minute

5	2	7	5	2	5	4	9
+2	+8	+3	+3	+6	+4	+3	+1
3	8	3	3	4	7	4	3
+4	+2	+6	+3	+5	+1	+4	+7
0	6	6	0	1	2	3	4
+10	+2	+3	+9	+8	+7	+5	+2
5	2	0	6	7	2	1	4
+5	+3	+7	+4	+2	+5	+9	+6

8 + 2 = _____	7 + 3 = _____	4 + 6 = _____
2 + 4 = _____	4 + 3 = _____	1 + 9 = _____
2 + 8 = _____	3 + 6 = _____	5 + 5 = _____
9 + 1 = _____	5 + 5 = _____	4 + 4 = _____
3 + 7 = _____	3 + 3 = _____	1 + 9 = _____
2 + 7 = _____	4 + 6 = _____	5 + 3 = _____

Review #5

Name _____

My Number is #___

Count

90, 80, 70, ___, ____, ____, ____, ____, ____, ____

45, 50, 55, ____, ____, ____, ____, ____, ____, ____

25, 24, 23, ____, ____, ____, ____, ____, _____, ____

44, 46, 48, ____, ____, ____, ____, ____, ____, _____

71, 72, 73, ____, ____, ____, ____, ____, _____, _____

Make 4 equations

7 11 4

Find the missing addends

_____ + 4 = 11

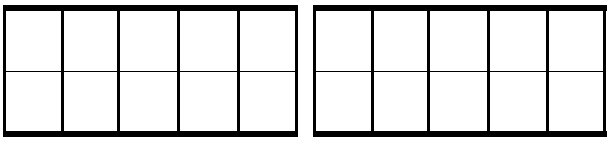
6 + _____ = 11

11 = _____ + 5

_____ + 9 = 11

11 = 8 + _____

Can you colour to find the magic *10*?



_ + _

8 + 3 =

(__ + __) + ____ =

Can you find a magic 10 ?

_ + _

8 + 3 = __

(8 + __) + __ = __

_ + _

6 + 5 = __

(6 + __) + __ = __

Subtract

11 - 3 =	**11 - 5 =**	**10 - 8 =**
10 - 7 =	**10 - 5 =**	**11 - 1 =**
11 - 4 =	**11 - 2 =**	**11 - 7 =**
10 - 3 =	**11 - 8 =**	**10 - 6 =**
11 - 6 =	**10 - 4 =**	**11 - 9 =**

Score Percent

Week 10 – All About 17 and 18, AdditionTricks

Day 1 – Discovering 17 and 18 – Working with 9

Oral Review - Count by 2's to 100, count by 5's to 100, count by 10's to 100 - forwards and backwards. Practice counting on and counting down from a number to 100. Review addition and subtraction to 10 and the strategies. Ask the children how you print some numbers to 1000, and before and after those numbers.

Daily Problem – *How many ways can you find to count to 17? (Only by 1's – 17 is a prime number.)*

Vocabulary Word of the Week - *thousand* Learn the meaning - *A 4 digit number, 10 hundreds. Learn to spell the word.*

Lesson -

Give each student 17 counters. Have them manipulate their counters to explore the combinations of 17. Have them print the addition equations with 2 addends – only 9 + 8 and 8 + 9.

Which is easier to add? You can do it 9 + 8 = (9 + 1) + 7, or 8 + 9 = (8 + 2) + 7.

Add one counter to make 18. 9 + 9 is a double. Can the children think of an easy way to remember it? If they can remember that 9 + 9 = 18, can that help us to remember 9 + 8 = 17?

Put the questions with 9 on the board. Put the children in groups and see if they can find a "trick" to adding these.

9 + 1	9 + 4	9 + 7
9 + 2	9 + 5	9 + 8
9 + 3	9 + 6	9 + 9

Think of the ten frames, with 9 in the first one and the other addend on the second. We need to take one from the second to make a ten.

Can the children see a pattern when adding 9? The answer is one less than the other addend, plus 10; or add 10 instead of 9 and then subtract 1. Put some 9 questions on the chalkboard and see how quickly the children can orally answer them, using this "trick". Put some in the reverse order (____ + 9 = ___) and the students mentally reverse the numbers.

Have the children work in pairs and answer questions with 9 as one of the addends.

Practice - 10.1

Discussion / Closure - Talk about the '9' trick. It should be difficult to add 9, but it is one of the easiest. Have them explain the trick in their own words.

Go over the re-grouping process and the partners for 17 and 18.

Day 2 – Working with 8 and 9

Oral Review - Count by 10's to 100 forwards and backwards, count backwards from 20. Review combinations of 10 orally. Review the doubles to 18. Do one "four stories" equation group. Ask the children how you print some numbers to 1000, and before and after those numbers.

Daily Problem – *There were 18 cookies in the bag. _____, _____, and _____ ate 3 cookies each. How many cookies are left in the cookie bag?*

Vocabulary Word of the Week - *thousand* Learn the meaning - *A 4 digit number, 10 hundreds. Learn to spell the word.*

Lesson -

Review the doubles to 18. You could have the students make rhymes for each, but do it with the 'answer' first for most so there are more rhyming words. 5 + 5 is 10, What a lot of men!..... 12 is 6 and 6, There is a pile of sticks…… etc. The sillier the better!

Give each student a bag of counters. Put questions with 8 on the board. Put the students in groups and see if they can find a "trick" to adding these.

8 + 2	8 + 6	Think of the ten frames, with 8 in the first one and the other addend on the second. We need to take two from the second to make a ten.
8 + 3	8 + 7	
8 + 4	8 + 8	
8 + 5	8 + 9	

Can the children see a pattern? The answer is 2 less than the other addend, plus 10. Put some 8 questions on the chalkboard and see how quickly the children can orally answer them, using a "trick". Put some in the reverse order (_____ + 8 = ____).

Have the children work in pairs and answer questions with 8 or 9 as one of the addends.

Does this work with 7? Or 6? How many would we subtract from the second addend?

Note: Some children will have difficulty "seeing" this. These children may use other skills to find the answers.

Practice - 10.2

Discussion / Closure - Have the children tell you about the tricks for adding 8 and 9.

Go over the re-grouping process.

Day 3 – Adding doubles

Oral Review - Count by 10's to 100 forwards and backwards, count backwards from 20. Review combinations of 10 orally. Review the 'trick' for adding 8 and adding 9. Ask the students how you print some numbers to 1000, and before and after those numbers.

Daily Problem – *What do you think is the favourite TV show with the children in the class? See if you are right! How will you find out? Make a graph to show the results.*

Vocabulary Word of the Week - *thousand* Learn the meaning - *A 4 digit number, 10 hundreds. Learn to spell the word.*

Lesson -

Give each student 20 counters and individual chalk boards (or paper). Have them write the doubles:

1 + 1 =	6 + 6 =
2 + 2 =	7 + 7 =
3 + 3 =	8 + 8 =
4 + 4 =	9 + 9 =
5 + 5 =	10 + 10 =

Can they see a pattern? Of course, the answers are counting by 2's. As the students know the 1 to 5 doubles and the 10 double, there are only four pairs to learn. These should be memorized, as we can use these to do other more difficult questions. Some ideas for memorization:

The answers are all even numbers. Chant, clap and snap the equations – each has a different rhythm:

six plus six equals twelve
seven, seven – that's fourteen!
Do you know eight plus eight? Eight plus eight is sixteen!
nine plus nine is eighteen

Have the students write 'two stories' for the doubles. Discuss the subtraction facts.

Go in pairs and the two students drill one another with these questions.

Practice - 10.3

Discussion / Closure - Do you find it difficult to remember any of these answers? If you do, what is a way that might help you remember?

Review the "tricks" for adding 9 and 8.

Day 4 – Adding doubles

Oral Review - Count by 10's to 100 forwards and backwards, count backwards from 20. Review combinations of 10 orally. Do one re-grouping problem, finding the magic 10 to add. Ask the students how you print some numbers to 1000, and before and after those numbers.

Daily Problem – *Do an estimation jar – filled with some sort of small treat. Each child writes the estimate on a slip of paper and puts it into another jar. Count the treats and see who is the closest. The winner gets the candy, but of course shares with the rest of the class.*

Vocabulary Word of the Week - *thousand* Learn the meaning - *A 4 digit number, 10 hundreds. Learn to spell the word.*

Lesson -

Review the doubles. Give each child 20 counters and individual chalk boards (or paper). Have them make each double and then add one. Write the equations.

1 + 1 =	1 + 2 =	6 + 6 =	6 + 7 =
2 + 2 =	2 + 3 =	7 + 7 =	7 + 8 =
3 + 3 =	3 + 4 =	8 + 8 =	8 + 9 =
4 + 4 =	4 + 5 =	9 + 9 =	9 + 10 =
5 + 5 =	5 + 6 =		

We can use the doubles to help us with these other questions. Double the smaller number and add one. Is there another way? We could double the larger number and the answer is one less.

Note: There is a correct answer, of course, but there is no "correct" way to come to the answer when adding. Some children will simply be able to memorize and some will use the 'tricks'. The more ways a child can re-arrange and re-group numbers, the easier it will be.

Put the students into pairs. Ask them to put down what they think the most difficult addition question (to 18) is, and then decide **how** to find the answer.

Practice - 10.4

Discussion / Closure - Have your students explain to each other and to you why it is important to know the doubles and how they can help us add.

Go over the re-grouping process, finding a magic 10. Review the "tricks" for adding 9 and 8, the doubles and the doubles plus one.

Day 5 – Review

Problem of the Day – *Make a pattern with 3 or 4 different elements. Can others add to your pattern?*

Vocabulary Word of the Week - *thousand* Learn the meaning - *A 4 digit number, 10 hundreds. Learn to spell the word.*

Speed Sheet #10 - This is the first addition to 18 speed sheet. You cannot expect great speed yet, and so it might be a good idea (depending on your class) to give the children 4 minutes timed, and then divide by 4 for the number per minute. Have them circle the last question finished and then complete the sheet. Score as described in the introduction. Keep the subtraction scores separate from addition.

Review #9 - Give the children time for most to complete the sheet. Mark and score. Total 25 marks.

- 4 points – before and after
- 2 points for 'how many sticks'
- 2 points for 'make four equations'
- 5 points for the missing addends
- 2 points for 'magic 10'
- 6 points for the doubles and doubles plus 1
- 4 points for counting on

Discussion / Closure - Review some of the ways that we can find answers. Did the students use the 9 and 8 trick when they did the speed sheet? Did they think about the doubles and the doubles plus one? You may want to have two copies of the speed sheet for each student, and after the tests, give out the second. Have them look for the tricks - find all the questions with a 9, then with an 8, the doubles and the doubles plus one, and do some with the regrouping to find a 10.

Notes:

Name _____

10.1 Adding With 9

My Number is #___

Before and after...

___, 86, ___	___, 309, ___	___, 800, ___
___, 735, ___	___, 764, ___	___, 611, ___
___, 899, ___	___, 279, ___	___, 540, ___
___, 604, ___	___, 400, ___	___, 395, ___

Can you add with 9? These are tricky!

6 + 9 = ___	5 + 9 = ___	9 + 3 = ___
9 + 9 = ___	7 + 9 = ___	2 + 9 = ___
9 + 7 = ___	1 + 9 = ___	4 + 9 = ___
9 + 8 = ___	9 + 8 = ___	9 + 6 = ___
9 + 4 = ___	9 + 5 = ___	3 + 9 = ___

Find the missing addends

_____ + 9 = 18

8 + _____ = 17

16 = _____ + 9

_____ + 9 = 15

13 = 9 + _____

Can you explain how you add with 9?

Make interesting equations for 17

Name _____

10.2 Adding With 8

My Number is #___

Before and after…

___, 325, ___	___, 209, ___	___, 401, ___
___, 679, ___	___, 134, ___	___, 310, ___
___, 599, ___	___, 879, ___	___, 999, ___
___, 906, ___	___, 900, ___	___, 795, ___

Can you add with 8? These are tricky!

6 + 8 = ___	5 + 8 = ___	8 + 3 = ___
8 + 9 = ___	7 + 8 = ___	9 + 8 = ___
8 + 7 = ___	3 + 8 = ___	4 + 8 = ___
8 + 8 = ___	4 + 8 = ___	8 + 6 = ___
8 + 4 = ___	8 + 5 = ___	3 + 8 = ___

Find the missing addends

_____ + 8 = 18

9 + _____ = 17

14 = _____ + 8

_____ + 8 = 16

13 = 8 + _____

Can you explain how you add 8?

Make interesting equations for 18

Name _____

10.3 Adding the Doubles

My Number is #___

Before and after…

___, 575, ___	___, 609, ___	___, 901, ___
___, 829, ___	___, 98, ___	___, 710, ___
___, 899, ___	___, 490, ___	___, 299, ___
___, 507, ___	___, 500, ___	___, 900, ___

Print two stories for the doubles

6	7	8	9

Find the missing addends

_____ + 8 = 18

9 + _____ = 17

14 = _____ + 8

_____ + 8 = 16

13 = 8 + _____

Give the partners for:

11

6 + 5	5 + 6

12

Can you add? These are tricky!

7 + 7 = ___	9 + 6 = ___	9 + 8 = ___
5 + 8 = ___	8 + 8 = ___	7 + 9 = ___
7 + 8 = ___	6 + 9 = ___	6 + 7 = ___
9 + 9 = ___	8 + 9 = ___	6 + 6 = ___
8 + 4 = ___	9 + 7 = ___	8 + 7 = ___

10.4 Adding Doubles Plus 1

Name _____

My Number is #___

Before and after…

___, 683, ___	___, 803, ___	___, 309, ___
___, 479, ___	___, 101, ___	___, 710, ___
___, 199, ___	___, 760, ___	___, 999, ___
___, 809, ___	___, 800, ___	___, 500, ___

Print four stories for the doubles + 1

5 6 11	6 7 13	7 8 15	8 9 17

Find the missing addends

_____ + 9 = 18

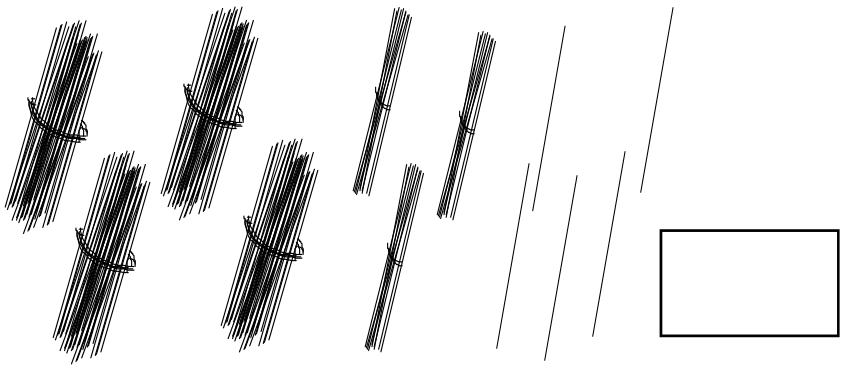
8 + _____ = 17

14 = _____ + 7

_____ + 9 = 16

13 = 6 + _____

How many sticks?



Can you add? These are tricky!

6 + 7 = ___	7 + 7 = ___	7 + 6 = ___
8 + 9 = ___	4 + 5 = ___	5 + 4 = ___
7 + 8 = ___	6 + 7 = ___	8 + 8 = ___
5 + 6 = ___	9 + 9 = ___	6 + 6 = ___
9 + 8 = ___	6 + 5 = ___	8 + 7 = ___

Speed Sheet #10

Name _____
My Number is #____

Score
___ /minute

4	9	5	2	4	8	8	7
+3	+4	+8	+8	+5	+9	+7	+5
8	3	8	7	5	2	5	9
+3	+9	+2	+6	+4	+6	+3	+7
9	6	9	7	4	5	9	4
+8	+9	+2	+8	+7	+7	+5	+8
4	6	8	6	7	3	5	8
+9	+3	+5	+4	+2	+8	+6	+2

9 + 9 = _____	8 + 8 = _____	8 + 4 = _____
2 + 8 = _____	9 + 3 = _____	5 + 9 = _____
3 + 7 = _____	4 + 6 = _____	7 + 9 = _____
9 + 6 = _____	8 + 6 = _____	6 + 4 = _____
6 + 5 = _____	6 + 7 = _____	7 + 4 = _____
3 + 6 = _____	4 + 9 = _____	6 + 8 = _____

Name _____

Review #10

My Number is #___

Before and after

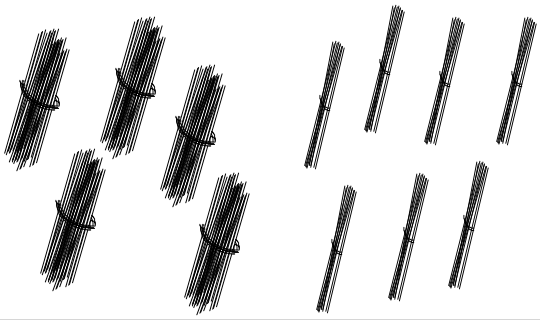
___, 573, ___

___, 210, ___

___, 590, ___

___, 800, ___

How many sticks?



Make 4 equations

8 7 15

Find the missing addends

_____ + 8 = 17

9 + _____ = 15

16 = _____ + 9

_____ + 8 = 15

14 = 6 + _____

Give the partners

13	14
+	+
+	+
+	+
+	+
+	+
+	

Can you find a magic 10?

_ + _

9 + 8 = __

(__ + __) + __ = __

_ + _

8 + 7 = __

(__ + __) + __ = __

Doubles and Doubles Plus 1

6 + 6 = ___, so 6 + 7 = ___

7 + 7 = ___, so 7 + 8 = ___

8 + 8 = ___, so 8 + 9 = ___

On the back of this paper, count beginning at 889.

Score Percent

Week 21 – Addition With Re-Grouping

Day 1 – 2-digit addition with re-grouping

Oral Review - Review strategies for addition and for subtraction. Review multiplication grouping. Ask the children how you print some numbers to 1000. Have them show ***mm., cm.*** and ***m.*** lengths with their hands. A fraction is —— of the ——– pieces. Tell time on your clock. What coins are needed to make $__._ _? Count coins.

Daily Problem – *I have 4 coins in this purse. Can you guess how much money I have?*

Vocabulary Word of the Week - *pyramid* Learn the meaning - *a solid object with triangular sides coming to a point on top. If there are 4 identical sides, the bottom is a square.*

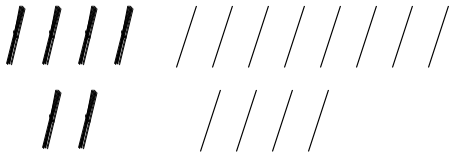
Lesson - Review place value to 100.

Make sure the students understand that 58 means 50 + 8 and also 5 tens + 8 ones.

Put the children in groups with plenty of popsicle stick or straw counters and elastics to make tens. Have them add several questions without re-grouping (45 + 34, for example). Now, ask them to make 36 and 45 . Ask them what we would do to add these two numbers. They will tell you that they have 7 tens and 11 ones. What number is that? We will make another 10, so that now we have 8 tens and 1 one. Do several more questions that are similar.

Now have the children draw out the questions on paper or on individual chalkboards.

48
+24



Then they are able to circle another 10 and see the answer. Do a number of similar questions. What do we add first? Where do we begin?

Practice - 21.1

Discussion / Closure - Now do you see why we begin to add with the ones? Do one more addition with re-grouping question together.

Day 2 - Addition with re-grouping

Oral Review - Review combinations of 10 orally. Do one "four stories" equation group. Review 'tricks' for addition and for subtraction. Review multiplication grouping. Ask the children how you print some numbers to 1000, and before and after that number. Have them show ***mm., cm.*** and ***m.*** lengths with their hands. A fraction is —— of the ——– pieces. Tell time on your clock. Count coins.

Daily Problem – *Do an estimation jar. Who's estimate comes the closest? Why is this called an estimate, rather than a guess?*

Vocabulary Word of the Week - *pyramid* Learn the meaning - *a solid object with triangular sides coming to a point on top. If there are 4 identical sides, the bottom is a square.*

Lesson -

Make sure the students understand that 27 means 20 + 7 and also 2 tens + 7 ones.

As yesterday, put the children in groups with plenty of popsicle stick or straw counters and elastics to make tens. Have them add several questions without re-grouping (36 + 22, for example). Now, ask them to make 57 and 28 . Ask them what we would do to add these two numbers. They will tell you that they have 7 tens and 15 ones. What number is that? We will make another 10, so that now we have 8 tens and 5 ones. Do several more questions that are similar.

Now have the students draw out the questions on paper or on individual chalkboards by showing tens and ones like this:

Then they are able to circle another 10 and see the answer. Do a number of similar questions. What do we add first? Where do we begin?

Practice - 21.2

Discussion / Closure - Have the students explain what they are doing to each other and the group. Do one more addition with re-grouping question together.

Day 3 - Addition with re-grouping

Oral Review - Review combinations of 10 orally. Do one "four stories" equation group. Review 'tricks' for addition and for subtraction. Review multiplication grouping. Ask the children how you print some numbers to 1000, and before and after that number. Have them show ***mm., cm.*** and ***m.*** lengths with their hands. A fraction is —— of the ——- pieces. Tell time on your clock. Count coins.

Daily Problem – *Add 6 + 2 + 5 + 1 + 3 + 8 + 9 + 4 + 7 + 5 = _____. Do you think this is a difficult question? Can you find a trick?*

Vocabulary Word of the Week - *pyramid* Learn the meaning - *a solid object with triangular sides coming to a point on top. If there are 4 identical sides, the bottom is a square.*

Lesson - Review using counters and tally marks for regrouping.

Do addition questions this way.

$$\begin{array}{rl} 27 & = 20 + 7 \\ +\ 66 & = 60 + 6 \\ \hline & 80 + 13 = 90 + 3 = 93 \end{array}$$

Show that this is what we are doing with the counters and the tally marks.
Have the children do questions using counters and writing their findings in the above format. Do the same using tally marks, circling the new ten. See if they can do the questions in this format without counters.

Practice - 21.3

Discussion / Closure - Have the students explain what they are doing to each other and the group. Do one more addition with re-grouping question together.

Day 4 - Addition with re-grouping

Oral Review - Review combinations of 10 orally. Do one "four stories" equation group. Review 'tricks' for addition and for subtraction. Review multiplication grouping. Ask the children how you print some numbers to 1000, and before and after that number. Have them show ***mm., cm.*** and ***m.*** lengths with their hands. A fraction is —— of the ——- pieces. Tell time on your clock. Count coins.

Daily Problem – _____ *had 25 jellybeans,* _____ *had 13 jellybeans, and* _____ *had 27 jellybeans. How many did they have all together?*

Vocabulary Word of the Week - *pyramid* Learn the meaning - *a solid object with triangular sides coming to a point on top. If there are 4 identical sides, the bottom is a square.*

Lesson - Repeat yesterday's lesson.
Review using counters and tally marks for regrouping.

Do addition questions this way.

$$\begin{array}{rl} 35 & = 30 + 5 \\ \underline{+\ 48} & \underline{= 40 + 8} \\ & 70 + 13 = 80 + 3 = 83 \end{array}$$

Show that this is what we are doing with the counters and the tally marks.

Have the children do questions using counters and writing their findings in the above format.

Do the same using tally marks, circling the new ten. See if they can do the questions in this format without counters.

Practice - 21.4

Discussion / Closure - Have the students explain what they are doing to each other and the group. Do one more addition with re-grouping question together.

Day 5 – Review

Problem of the Day – *Mom cut the pizza into 8 pieces. _____ ate 4 of the pieces! What fraction of the pizza did he eat? _____ ate 2 pieces. What is his/her fraction?*

Vocabulary Word of the Week - *pyramid* Learn the meaning - *a solid object with triangular sides coming to a point on top. If there are 4 identical sides, the bottom is a square.*

Speed Sheet #21 - Addition to 18 speed sheet.

Review #21 - Give the children time for most to complete the sheet. Mark and score. Total 50 marks.

- 10 points for addition with regrouping
- 6 points – money, fraction and clocks
- 12 points for addition and subtraction
- 4 points for estimation
- 10 points for subtraction
- 6 points for multiplication
- 2 points for multiplication to addition

Discussion / Closure - The students should be able to do the addition speed sheet quite quickly now. How many people are scoring more than 12 questions per minute? More than 15? What strategies are they using? Discuss the different strategies.

Notes:

21.1 Addition

Name _____
My Number is #___

Draw these questions

25 + 38 = __ tens + __ ones = ___	**34 + 17 = __ tens + __ ones = ___**
58 + 18 = __ tens + __ ones = ___	**37 + 26 = __ tens + __ ones = ___**

75	**66**	**57**	**57**	**65**	**42**
+24	**+42**	**+41**	**+52**	**+63**	**+47**

9 + 5 = __	**9 + 9 = __**	**16 - 8 = __**	**14 - 5 = __**
7 + 4 = __	**6 + 6 = __**	**11 - 9 = __**	**15 - 8 = __**

4 x 2 = ___	**4 x 3 = ___**	**2 x 6 = ___**
5 x 4 = ___	**2 x 5 = ___**	**2 x 3 = ___**

21.2 Addition

Name _____
My Number is #___

Draw these questions

18 + 26 = __ tens + __ ones = ___	**34 + 28 = __ tens + __ ones = ___**
27 + 38 = __ tens + __ ones = ___	**45 + 9 = __ tens + __ ones = ___**

65	**52**	**77**	**92**	**66**	**61**
+14	**+46**	**+32**	**+26**	**+63**	**+67**

7 + 5 = __	**6 + 9 = __**	**15 - 6 = __**	**14 - 7 = __**
9 + 4 = __	**6 + 5 = __**	**11 - 4 = __**	**13 - 6 = __**

8 x 2 = ___	**5 x 3 = ___**	**2 x 4 = ___**
3 x 4 = ___	**2 x 9 = ___**	**3 x 3 = ___**

21.3 Addition

Name _____
My Number is #___

Draw these questions

35 + 16 = __ tens + __ ones = ___	**43 + 38 = __ tens + __ ones = ___**

67 = 60 + 7 **+ 15 = 10 + 5** **__ + _ = ___**	**36 = ___ + _** **+ 47 = ___ + _** **___ + _ = ___**
19 = __ + _ **+ 14 = __ + _** **__ + _ = ___**	**79 = __ + _** **+ 16 = __ + _** **__ + _ = ___**

42	**82**	**34**	**83**	**69**	**81**
+17	**+45**	**+32**	**+26**	**+60**	**+35**

7 + 7 = __ **6 + 8 = __** **14 - 9 = __** **13 - 7 = __**

7 + 4 = __ **9 + 5 = __** **11 - 2 = __** **15 - 6 = __**

8 x 1 = ___ **5 x 5 = ___** **2 x 5 = ___**

3 x 3 = ___ **2 x 6 = ___** **3 x 4 = ___**

21.4 Addition

Name _____
My Number is #___

Draw these questions

29 + 24 = __ tens + __ ones = ___	46 + 17 = __ tens + __ ones = ___

35 = 30 + 5 + 28 = 20 + 8 __ + _ = __	49 = __ + _ + 14 = __ + _ __ + _ = ___
66 = __ + _ + 28 = __ + _ __ + _ = ___	47 = __ + _ + 43 = __ + _ __ + _ = ___

88	76	44	69	79	83
-68	+43	+25	-66	-38	+65

8 + 7 = __ 9 + 8 = __ 14 - 6 = __ 13 - 5 = __

5 + 9 = __ 9 + 3 = __ 11 - 7 = __ 15 - 9 = __

7 x 1 = ___ 3 x 4 = ___ 2 x 0 = ___

5 x 3 = ___ 2 x 8 = ___ 4 x 4 = ___

Speed Sheet #21

Name _____ Score

My Number is #___ ___ /minute

3	5	8	6	6	8	8	7
+6	+9	+7	+4	+5	+9	+4	+9
2	3	8	9	5	9	9	6
+8	+7	+8	+8	+8	+3	+6	+9
8	9	7	9	3	9	5	4
+2	+5	+8	+9	+9	+2	+7	+8
9	5	6	2	5	4	8	4
+4	+6	+8	+8	+8	+7	+2	+5

7 + 2 = _____	6 + 8 = _____	7 + 6 = _____
3 + 8 = _____	8 + 3 = _____	4 + 9 = _____
6 + 3 = _____	8 + 6 = _____	5 + 3 = _____
8 + 5 = _____	4 + 6 = _____	2 + 6 = _____
8 + 7 = _____	7 + 5 = _____	6 + 7 = _____
6 + 4 = _____	4 + 9 = _____	5 + 4 = _____

Name _____

My Number is #___

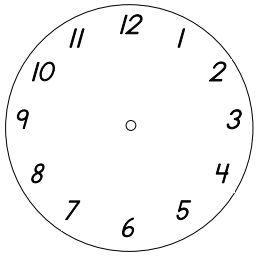
Review #21

37 + 16 = __ tens + __ ones = ___

47 = __ + _
+ 48 = __ + __
__ + _ = ___

26 = __ + _
+ 38 = __ + __
__ + _ = ___

Draw $2.46



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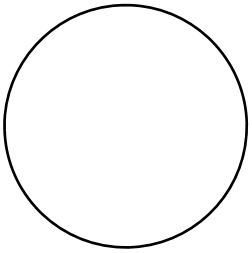
Draw the fraction



1/8

27	86	47	79	38	53
-13	+43	+41	-54	-16	+25

Estimate the length of a hammer. _____

Estimate the length of a spider. _____

__ + _
13
- 8
__ + _ = _

12 - 7 = __
11 - 6 = __
14 - 6 = __

13 - 8 = __
15 - 9 = __
17 - 9 = __

12 - 8 = __
16 - 9 = __
14 - 5 = __

6 x 2 = ___
5 x 3 = ___

3 x 2 = ___
1 x 8 = ___

7 x 0 = ___
2 x 7 = ___

Make an addition question

4 x 5 = ___	3 x 5 = __
_____	_____

Score Percent